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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,688	01/02/2001	Masashi Hachinota	Q62534	8185

7590 06/07/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

VOLPER, THOMAS E

ART UNIT	PAPER NUMBER
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2665

6

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,688

Applicant(s)

HACHINOTA, MASASHI

Examiner

Thomas Volper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Iliadis et al. (US 5,742,606).

Regarding claims 1 and 6, Applicant's admitted prior art (AAPA) discloses switching equipment that includes M input line buffers, an MxN crossbar type switch for switching cells based on a cross point on/off control signal, N output lines sections and an arbiter that outputs a connection permission signal to one of said input line buffers based on connection request signals outputted from said M input line buffers and outputs said cross point on/off control signal to said MxN crossbar type switch (pages 1 and 2 of the Specification; Fig. 1). AAPA fails to expressly disclose sending the connection permission signal at a designated slower timing interval than a normal timing interval to one input line buffer that outputs cells to an external output line whose output line rate is slower than a corresponding input line rate. Iliadis discloses

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a packet switch wherein if an output buffer for a particular output line enters an overflow state, i.e. the output line rate is slower than the input line rate, an interruption is triggered for the transmitting input for a time period T , rather than simply retrying the transmission in the next switch cycle (col. 4, lines 1-20 and lines 32-44). This meets the limitation of a slower timing interval than a normal timing interval for sending packets from one input line buffer to a corresponding output line. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use this interrupt feature of Iliadis in the arbiter of the system provided by AAPA. One of ordinary skill in the art would have been motivated to do this in order to prevent the output line buffer from losing packets due to overflow.

Regarding claim 2, the previous paragraph discloses that all the functions of claim 2 are present in the arbiter of the combination of AAPA in view of Iliadis.

Regarding claim 3, Iliadis discloses an interruption triggered by backpressure from the output buffer (col. 4, lines 1-11), which meets the limitation of a mask signal, and that a signal is given after time T (col. 4, lines 15-16), which meets the limitation of a mask cancellation signal.

Regarding claim 4, Iliadis discloses that the time period T is a multiple of one switch cycle (col. 4, lines 15-20). A switch cycle represents the normal timing interval.

Regarding claim 5, AAPA discloses M input line buffers comprising N FIFOs, a distributor and a selector (pages 1 and 2 of the Specification).

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Conclusion

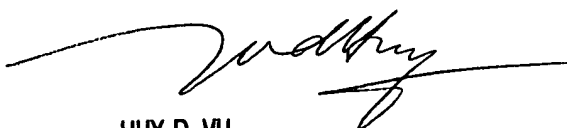
4. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper

TV

May 28, 2004


HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600